



MERCHANT &amp; GOULD P.C.

## United States Patent Application

## COMBINED DECLARATION AND POWER OF ATTORNEY

a below named inventor I hereby declare that: my residence, post office address and citizenship are as stated below next to my name, that

I verily believe I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: DYNAMICALLY CONTROLLED CRYSTAL GROWTH SYSTEM

The specification of which

a.  is attached hereto  
b.  was filed on 26 February 2002 as application serial no. 10/085,479 and was amended by Preliminary Amendment with filing (if applicable) (in the case of a PCT-filed application) described and claimed in international no. filed and as amended on (if any), which I have reviewed and for which I solicit a United States patent.

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I hereby claim foreign priority benefits under Title 35, United States Code, § 119/365 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on the basis of which priority is claimed:

a.  no such applications have been filed.  
b.  such applications have been filed as follows:

## FOREIGN APPLICATION(S), IF ANY, CLAIMING PRIORITY UNDER 35 USC § 119

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

## ALL FOREIGN APPLICATION(S), IF ANY, FILED BEFORE THE PRIORITY APPLICATION(S)

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	DATE OF ISSUE (day, month, year)

I hereby claim the benefit under Title 35, United States Code, § 120/365 of any United States and PCT international application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)
08/719,481	25 September 1996	abandoned
09/131,729	10 August 1998	pending

I hereby claim the benefit under Title 35, United States Code § 119(e) of any United States provisional application(s) listed below:

U.S. PROVISIONAL APPLICATION NUMBER	DATE OF FILING (Day, Month, Year)
60/004,267	25 September 1995

I acknowledge the duty to disclose information that is material to the patentability of this application in accordance with Title 37, Code of Federal Regulations, § 1.56 (reprinted below):

**§ 1.56 Duty to disclose information material to patentability.**

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim;

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application;

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

(e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby appoint the following attorney(s) and/or patent agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith:

Ali, M. Jeffer	Reg. No. 46,359	Leonard, Christopher J.	Reg. No. 41,940
Altera, Allan G.	Reg. No. 40,274	Liepa, Mara E.	Reg. No. 40,066
Anderson, Gregg I.	Reg. No. 28,828	Lindquist, Timothy A.	Reg. No. 40,701
Batzli, Brian H.	Reg. No. 32,960	Lown, Jean A.	Reg. No. 48,428
Beard, John L.	Reg. No. 27,612	McDonald, Daniel W.	Reg. No. 32,044
Berns, John M.	Reg. No. 43,496	McIntyre, Jr., William F.	Reg. No. 44,921
Branch, John W.	Reg. No. 41,633	Mueller, Douglas P.	Reg. No. 30,300
Brown, Jeffrey C.	Reg. No. 41,643	Nelson, Anna M.	Reg. No. 48,935
Bruess, Steven C.	Reg. No. 34,130	Parsons, Nancy J.	Reg. No. 40,364
Burnham, Jonelle	Reg. No. 41,980	Pauly, Daniel M.	Reg. No. 40,123
Byrne, Linda M.	Reg. No. 32,404	Phillips, John B.	Reg. No. 37,206
Campbell, Keith	Reg. No. 46,597	Pino, Mark J.	Reg. No. 43,858
Carlson, Alan G.	Reg. No. 25,959	Prendergast, Paul	Reg. No. 46,068
Caspers, Philip P.	Reg. No. 33,227	Pytel, Melissa J.	Reg. No. 41,512
Clifford, John A.	Reg. No. 30,247	Qualey, Terry	Reg. No. 25,148
Cook, Jeffrey	Reg. No. 48,649	Randall, Joshua N.	Reg. No. P-50,719
Daignault, Ronald A.	Reg. No. 25,968	Reich, John C.	Reg. No. 37,703
Daley, Dennis R.	Reg. No. 34,994	Reiland, Earl D.	Reg. No. 25,767
Daulton, Julie R.	Reg. No. 36,414	Schmaltz, David G.	Reg. No. 39,828
DéVries Smith, Katherine M.	Reg. No. 42,157	Schuman, Mark D.	Reg. No. 31,197
DiPietro, Mark J.	Reg. No. 28,707	Schumann, Michael D.	Reg. No. 30,422
Doscotch, Matthew A.	Reg. No. 48,957	Scull, Timothy B.	Reg. No. 42,137
Edell, Robert T.	Reg. No. 20,187	Sebald, Gregory A.	Reg. No. 33,280
Epp Ryan, Sandra	Reg. No. 39,667	Skoog, Mark T.	Reg. No. 40,178
Fitzsimmons, Karen A.	Reg. No. P-50,470	Spellman, Steven J.	Reg. No. 45,124
Goff, Jared S.	Reg. No. 44,716	Stewart, Alan R.	Reg. No. 47,974
Goggin, Matthew J.	Reg. No. 44,125	Stoll-DeBell, Kirstin L.	Reg. No. 43,164
Golla, Charles E.	Reg. No. 26,896	Sullivan, Timothy	Reg. No. 47,981
Gorman, Alan G.	Reg. No. 38,472	Sumner, John P.	Reg. No. 29,114
Gould, John D.	Reg. No. 18,223	Swenson, Erik G.	Reg. No. 45,147
Gregson, Richard	Reg. No. 41,804	Tellekson, David K.	Reg. No. 32,314
Grésens, John J.	Reg. No. 33,112	Trembath, Jon R.	Reg. No. 38,344
Hamer, Samuel A.	Reg. No. 46,754	Tunheim, Marcia A.	Reg. No. 42,189
Hamre, Curtis B.	Reg. No. 29,165	Underhill, Albert L.	Reg. No. 27,403
Harrison, Kevin C.	Reg. No. 46,759	Vandenburgh, J. Derek	Reg. No. 32,179
Henning, Mark	Reg. No. 48,982	Wahl, John R.	Reg. No. 33,044
Hertzberg, Brett A.	Reg. No. 42,660	Weaver, Paul L.	Reg. No. 48,640
Hillson, Randall A.	Reg. No. 31,838	Welter, Paul A.	Reg. No. 20,890
Holzer, Jr., Richard J.	Reg. No. 42,668	Whipps, Brian	Reg. No. 43,261
Hope, Leonard J.	Reg. No. 44,774	Whitaker, John E.	Reg. No. 42,222
Jardine, John S.	Reg. No. 48,835	Wier, David D.	Reg. No. 48,229
Johns, Nicholas P.	Reg. No. 48,995	Williams, Douglas J.	Reg. No. 27,054
Johnston, Scott W.	Reg. No. 39,721	Withers, James D.	Reg. No. 40,376
Kadievitch, Natalie D.	Reg. No. 34,196	Wong, Bryan	Reg. No. P-50,836
Kalinsky, Robert A.	Reg. No. P-50,471	Wong, Thomas S.	Reg. No. 48,577
Kettelberger, Denise	Reg. No. 33,924	Young, Thomas	Reg. No. 25,796
Keys, Jeramie J.	Reg. No. 42,724	Zeuli, Anthony R.	Reg. No. 45,255
Knearl, Homer L.	Reg. No. 21,197		
Kowalchyk, Alan W.	Reg. No. 31,535		
Kowalchyk, Katherine M.	Reg. No. 36,848		
Lamberty, Michael	Reg. No. P-50,760		
Lacy, Paul E.	Reg. No. 38,946		
Larson, James A.	Reg. No. 40,443		

I hereby authorize them to act and rely on instructions from and communicate directly with the person/assignee/attorney/firm/ organization who/which first sends/sent this case to them and by whom/which I hereby declare that I have consented after full disclosure to be represented unless/until I instruct Merchant & Gould P.C. to the contrary.

I understand that the execution of this document, and the grant of a power of attorney, does not in itself establish an attorney-client relationship between the undersigned and the law firm Merchant & Gould P.C., or any of its attorneys.

Please direct all correspondence in this case to Merchant & Gould P.C. at the address indicated below:

Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

\*235  
59\*

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2	Full Name Of Inventor	Family Name BRAY	First Given Name Terry	Second Given Name L.
0	Residence & Citizenship	City Hoover	State or Foreign Country Alabama	Country of Citizenship United States
1	Mailing Address	Address 4016 Bent River Lane	City Hoover	State & Zip Code/Country Alabama 35216, United States

Signature of Inventor 201:



Date:

09/30/02

2	Full Name Of Inventor	Family Name KIM	First Given Name Larry	Second Given Name J.
0	Residence & Citizenship	City Birmingham	State or Foreign Country Alabama	Country of Citizenship United States
2	Mailing Address	Address 1706-A 14th Terrace S.	City Birmingham	State & Zip Code/Country Alabama 35205, United States

Signature of Inventor 202:



Date:

09/28/02

2	Full Name Of Inventor	Family Name HARRINGTON	First Given Name Michael	Second Given Name
0	Residence & Citizenship	City Birmingham	State or Foreign Country Alabama	Country of Citizenship United States
3	Mailing Address	Address 2438 Rockcreek	City Birmingham	State & Zip Code/Country Alabama 35226, United States

Signature of Inventor 203:

Date:

2	Full Name Of Inventor	Family Name DELUCAS	First Given Name Lawrence	Second Given Name J.
0	Residence & Citizenship	City Birmingham	State or Foreign Country Alabama	Country of Citizenship United States
4	Mailing Address	Address 5533 Afton Drive	City Birmingham	State & Zip Code/Country Alabama 35242, United States

Signature of Inventor 204:



Date:

10-1-02

Please direct all correspondence in this case to Merchant & Gould P.C. at the address indicated below:

Merchant & Gould P.C.  
P.O. Box 2903  
Minneapolis, MN 55402-0903

\*2355  
2\*

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2	Full Name Of Inventor	Family Name BRAY	First Given Name Terry	Second Given Name L.
0	Residence & Citizenship	City Hoover	State or Foreign Country Alabama	Country of Citizenship United States
1	Mailing Address	Address 4016 Bent River Lane	City Hoover	State & Zip Code/Country Alabama 35216, United States

Signature of Inventor 201: \_\_\_\_\_ Date: \_\_\_\_\_

2	Full Name Of Inventor	Family Name KIM	First Given Name Larry	Second Given Name J.
0	Residence & Citizenship	City Birmingham	State or Foreign Country Alabama	Country of Citizenship United States
2	Mailing Address	Address 1706-A 14th Terrace S.	City Birmingham	State & Zip Code/Country Alabama 35205, United States

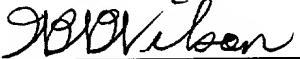
Signature of Inventor 202: \_\_\_\_\_ Date: \_\_\_\_\_

2	Full Name Of Inventor	Family Name HARRINGTON	First Given Name Michael	Second Given Name
0	Residence & Citizenship	City Birmingham	State or Foreign Country Alabama	Country of Citizenship United States
5	Mailing Address	Address 2438 Rockcreek	City Birmingham	State & Zip Code/Country Alabama 35226, United States

Signature of Inventor 203: \_\_\_\_\_ Date: \_\_\_\_\_

2	Full Name Of Inventor	Family Name DELUCAS	First Given Name Lawrence	Second Given Name J.
0	Residence & Citizenship	City Birmingham	State or Foreign Country Alabama	Country of Citizenship United States
4	Mailing Address	Address 5533 Afton Drive	City Birmingham	State & Zip Code/Country Alabama 35242, United States

Signature of Inventor 204: \_\_\_\_\_ Date: \_\_\_\_\_

2	Full Name Of Inventor	Family Name WILSON	First Given Name Wilbur	Second Given Name William
0	Residence & Citizenship	City Starkville	State or Foreign Country Mississippi	Country of Citizenship United States
5	Mailing Address	Address 1544 Hillbrook Drive	City Starkville	State & Zip Code/Country Mississippi 39759, United States
Signature of Inventor 205: 			Date:	9/26/02